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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,989	09/25/2003	Michael Wisniewski	PROS1130	4517
44654 7590 01/23/2008 SPRINKLE IP LAW GROUP 1301 W. 25TH STREET SUITE 408 AUSTIN, TX 78705			EXAMINER SAINDON, WILLIAM V	
			ART UNIT 3623	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/670,989	Applicant(s) WISNIEWSKI ET AL.	
	Examiner WILLIAM V. SAINDON	Art Unit 3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following NON FINAL Office Action is in response to Applicant's submission received September 25, 2003. Claims 1-33 are pending.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The invention as claimed is directed towards the statutory category of a process. However, the invention contains the abstract idea of algorithm manipulation and therefore falls under a 35 U.S.C. 101 judicial exception. A practical application of a judicial exception may render the invention statutory. A claimed invention is directed to a practical application of a 35 U.S.C. 101 judicial exception when it either transforms an article or physical object to a different state or thing, or otherwise produces a useful, concrete and tangible result. See MPEP § 2106.

The present invention does not transform an article or physical object because it is merely a method to manipulate an algorithm.

The present invention does not produce a tangible result because the end result of the process is an algorithm, which is an idea, not a 'real-world result.'

The steps of matching, selecting, and updating do not produce a real world result. Only data and other abstract ideas are manipulated. Because the invention

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never produces a result that is seen in the real, tangible world, it is not a practical application of a judicial exception.

4. Claims 12-22, 28-32 are further rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The invention as claimed is directed towards a "machine-readable media." However, under the broadest reasonable interpretation in light of the specification, the machine-readable media includes signals and text, which are non-statutory.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-33 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter that was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Analysis will be directed to claim 33 as it is the most comprehensive of the independent claims and the other independent claims are not separately patentable.

In claim 33, applying language commonly used in the art:

A. customer segmentation is performed [customer is matched to a profile];

B. a marketing plan is selected among alternatives [selecting an action from a set of actions based on an algorithm];

C. the marketing plan is executed [presenting action, receiving response];

D. the expected outcome of the executed marketing plan is revised based on the received response [updating a response forecast];

E. the marketing plan is revised based upon the revised expected outcome [updating the algorithm].

The specification does not provide any description as to how the segmentation is preformed, how the marketing plan is selected, how to revise the expected outcome of the plan, or how to revise the marketing plan. Instead, the specification merely states that these various actions are performed, and noting “[t]he formulation of such selection algorithms will be obvious to those of ordinary skill in the art” (¶ 38, noting this corresponds to step B), and “it will be obvious ... how such estimates, distributions, and forecasts are to be calculated” (¶ 46, noting this corresponds to step D).

Customer segmentation, marketing, and behavior forecasting are complex arts. While many different types of techniques of each are known and available to one of ordinary skill in the art, it would not be clear how to use the Applicant’s invention without undue experimentation because the specification provides no guidance as to how to choose a relevant customer segmentation, marketing, and behavior forecasting model. Further, customer segmentation, marketing, and behavior forecasting are not predictable arts in that they deal with ‘soft’ skills [intuition, luck, etc] and will not always provide the same result because they deal with complex, unpredictable, human

emotions and buying habits. Therefore, undue experimentation would result from one of ordinary skill trying to make and/or use the claimed invention.

Further claims are rejected for being dependent from a rejected claim.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 8-10, 19-21, 26-27, and 31-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 8, a response forecast is formulated; however a response forecast was updated in claim 1. It is unclear if this is a new response forecast, or if the forecast already recited in claim 1 is modified by the new customer response in claim 8. The Examiner will construe this claim as incorporating a customer response to the response forecast update of claim 1.

As to claim 9, it is unclear how updating the forecast based on a customer response is different the formulating a forecast in claim 8. Claim 9 appears to fail to further limit claim 8.

As to claim 10, it is unclear how this claim further limits claim 9, as it repeats a step already completed in claim 1.

As to claim 26, it is unclear how a response forecast is formulated because a response forecast is already updated in claim 23. Is a new forecast being generated or an existing forecast being updated?

As to claim 27, it is unclear how this claim further limits claim 23, because the response forecast is already based on a customer response. A customer response is at least one customer response.

Claims 19-21 and 31-32 are rejected for similar reasons as claims 8-10 and 26-27, respectively.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-33 are rejected under 35 U.S.C. 102(a & e) as being anticipated by Santos et al. (US 2002/0169654) (hereinafter Santos).

As to claim 1, Santos discloses:

matching a customer to a profile (see ¶ 9, noting customer segmentation is used);

selecting an action from a set of actions associated with the profile using a first algorithm (see ¶ 10, noting that a marketing action set is considered and is applied to a customer); and

updating the first algorithm based on a response forecast (see ¶ 16, noting the probability that a customer will buy is forecast and used as a basis for selecting an action).

As to claim 2, Santos discloses collecting information on the customer (see ¶ 9, noting that registration sequences of customers are tracked).

As to claim 3, Santos discloses augmenting the information with external sources (see id., noting that transactional data comes from an external source such as a POS terminal or other report).

As to claim 4, Santos discloses defining a customer need (see id., noting that a purchase of a good indicates a customer need for that good).

As to claim 5, Santos discloses matching a customer to a profile is done using a second algorithm (see id., noting that customer segmentation is a series of steps [algorithm] used to segment customers).

As to claim 6, Santos discloses the set of actions is specific to the profile (see id., noting the registration sequence used to segment the customer is specific to the segment or it would not have been segmented there).

As to claim 7, Santos discloses the first algorithm uses a history of responses for the profile in selecting the action (see Fig. 1, noting that the observation log is used for setting up the segments that the selected action is based on; ¶ 29, noting the transaction histories are used to help define promotions).

As to claim 8, Santos discloses formulating a response forecast using at least one customer's response (see ¶ 32, noting customer interactions are fed back into the system).

As to claim 9, Santos discloses updating the response forecast based on the at least one customer's response (see id., noting that when the system receives the feedback, it updates the plan based upon the new forecasted response).

As to claim 10, Santos discloses updating the first algorithm based on the response forecast (see Fig. 2, noting that the segments are defined based upon updated information based on the response of the campaign).

As to claim 11, Santos discloses presenting the action to the customer (see Fig. 2, noting the campaign is executed, meaning a customer is presented with the action).

Claims 12-22 are rejected for similar reasons as claims 1-11.

As to claim 23, Santos discloses:

identifying a set of actions (see ¶10, noting the various marketing actions possible);

selecting an action from the set of actions using an algorithm (see id., noting a marketing action is presented to a customer, thus selected);

updating a response forecast based on a customer's response (see Fig. 2, noting that responses from customers are fed back into the system); and

updating the algorithm based on the response forecast (see id., noting that the system incorporates the customer expectation feedback).

Claims 24-27 are rejected for similar reasons as claims 6-9, respectively.

Claims 28-32 are rejected for similar reasons as claims 23-27, respectively.

Claim 33 is rejected for similar reasons as claims 1 and 23.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 1, 12, 23, 28, and 33 rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art.

Applicant admits the following:

"It will be obvious to those of ordinary skill in the art how such estimates, distributions, and forecasts are to be calculated." (¶ 46)

"The formulation of such selection algorithms will be obvious to those of ordinary skill in the art." (¶ 38)

Analysis will be directed to claim 33 as it is the most comprehensive of the independent claims and the other independent claims are not separately patentable.

As to claim 33, Applicant claims only known elements being used in their known context for their known purpose:

- matching a customer to a profile [customer segmentation];
- selecting an action from a set of actions associated with the profile based on an algorithm [creating a marketing plan, admitted prior art at ¶ 38];
- presenting the action to the customer [execution of plan];
- receiving a customer's response to the action [monitoring result of plan];
- updating a response forecast based on the customer's response [updating an expectation, admitted prior art at ¶ 46]; and
- updating the algorithm based on the response forecast [creating marketing plan using best known data, admitted prior art at ¶ 38].

Each of the above elements is old and well known in the art by common knowledge or admission.

Each of the above elements is being used in its regular and usual manner. That is, customer segmentation is used to match customers to a profile for the purpose of creating a marketing plan targeted at that segment. The plan is executed and feedback is received. The plan is then updated for the purposes of incorporating feedback to make the plan better.

Each of the above elements is used for its known purpose. That is, the results of the use of each element are predictable. Customer segmentation is known to divide customers into identifiable segments for the purpose of targeting them with specific marketing plans. The selection of an appropriate marketing plan is known to provide the best chances at meeting the objective of the marketing plan. The presentation of the plan and receipt of results is known to execute the plan and provide information to be used for feedback. The updating of a response forecast based upon customer response is known to update the models used to model customer behavior based upon actual data. The updating of the marketing plan selection method based upon the actual, observed behavior of customers is known to allow for more accurate prediction in the future as models become closer to reality based upon trial and error.

Each of the above elements is combined according to known methods. In marketing, customer segmentation first used to identify a customer segment to target in a marketing plan. Then, a marketing plan is created to derive some benefit from the identified customer segment. Next, the marketing plan is executed and results tallied to measure the effectiveness of the plan on that customer segment. Then, the methodologies used to determine what the appropriate plan is to derive benefit from the identified customer segment are updated using the newfound knowledge.

Therefore, the claim combines prior art elements according to known methods to yield predictable results, and it would have been obvious to a person having ordinary skill in the art at the time of invention to combine and use these known elements.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached PTO-892, note especially the following NPL:

Terrence V. O'Brien et al., "Marketing information systems for consumer products companies," J. Consumer Marketing, vol. 12, iss. 5, p. 16 (1995), disclose a tool that optimizes a marketing process by evaluating strategic alternatives, providing marketing sales forecasting based on historical trends, and identifying consumer profiles.

Vicki G. Morwitz & David C. Schmittlein, "Testing New Direct Marketing Offerings," Management Science, vol. 44, no. 5, p. 610 (May 1998), disclose that different actions are taken based on various customer prospect types. A response is forecast based on past consumer behavior. Knowledge is gained from tests and used to update for 'next time.'

David C. Schmittlein & Robert A. Peterson, "Customer Base Analysis," Marketing Science, vol. 13, no. 1, p. 41 (Winter 1994), disclose forecasting behaviors of customer groups based on various historical data.


15. This Office action has an attached requirement for information under 37 CFR 1.105. A complete reply to this Office action must include a complete reply to the attached requirement for information. The time period for reply to the attached requirement coincides with the time period for reply to this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM V. SAINDON whose telephone number is (571)270-3026. The examiner can normally be reached on M-F 7:30-5; alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/wvs/


BETH VAN DOREN
PRIMARY EXAMINER

Request for Information under 37 CFR § 1.105

16. Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

17. The information is required to complete the background description in the disclosure by documenting that the algorithm stated in ¶ 38, and the forecast stated in ¶ 46, are old and well known.

18. In response to this requirement, please provide the title, citation and copy of each publication that is a source used for the description of the prior art in the disclosure. For each publication, please provide a concise explanation of that publication's contribution to the description of the prior art.

19. In response to this requirement, please state whether any search of prior art was performed. If a search was performed, please state the citation for each prior art collection searched. If any art retrieved from the search was considered material to demonstrating the knowledge of a person having ordinary skill in the art to the disclosed algorithm of ¶ 38 and forecast of ¶ 46, please provide the citation for each piece of art considered and a copy of the art.

20. In response to this requirement, please state the specific improvements of the subject matter in claims 1-33 over the disclosed prior art and indicate the specific elements in the claimed subject matter that provide those improvements. For those claims expressed as means or steps plus function, please provide the specific page and line numbers within the disclosure which describe the claimed structure and acts.

21. In responding to those requirements that require copies of documents, where the document is a bound text or a single article over 50 pages, the requirement may be met by providing copies of those pages that provide the particular subject matter indicated in the requirement, or where such subject matter is not indicated, the subject matter found in applicant's disclosure.


22. The fee and certification requirements of 37 CFR 1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents within the scope of this requirement under 37 CFR 1.105 that are included in the applicant's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this requirement and any information disclosures beyond the scope of this requirement under 37 CFR 1.105 are subject to the fee and certification requirements of 37 CFR 1.97.

23. The applicant is reminded that the reply to this requirement must be made with candor and good faith under 37 CFR 1.56. Where the applicant does not have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained may be accepted as a complete reply to the requirement for that item.

24. This requirement is an attachment of the enclosed Office action. A complete reply to the enclosed Office action must include a complete reply to this requirement. The time period for reply to this requirement coincides with the time period for reply to the enclosed Office action.

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/wvs/



TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600